

**Notice of Allowability****Application No.**

09/628,122

**Applicant(s)**ELLIOT, CANDICE HELLEN  
BROWN**Examiner**

Jin-Cheng Wang

**Art Unit**

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/19/2007.
2. ☒ The allowed claim(s) is/are 1-5,16-20,31-39,42 and 52-63.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>3/23/2007</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                    | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

The claims 1-5, 56-62, and 16-20 of the amendment of 3/19/2007 are allowed for the reasons set forth below. Nothing in the prior art anticipates or suggests, "said display further comprises at least first and second gate drivers oriented in a first direction and at least first and second data drivers oriented in a second direction different from said first direction; wherein a first blue emitter is connected to a first gate driver in said first direction and to a first data driver in said second direction; and wherein a second neighboring blue emitter is connected to said first data driver in said second direction" in a display comprising a plurality of three-color pixel elements, as set forth in the independent Claim 1 and 16. The claims 2-5 and 56-62 depend upon the claim 1 and are allowed for the reasons discussed above. The claims 17-20 depend upon the claim 16 and are allowed for the reasons discussed above.

The claims 31-33, 34-36 and 39 of the amendment of 3/19/2007 are allowed for the reasons set forth below. Nothing in the prior art anticipates or suggests, "each emitter is connected to a column driver and at least two neighboring blue emitters disposed in the at least one row in the array are connected to the same column driver" in an array for a display, as set forth in the independent Claim 31, Claim 34 and Claim 39. The claims 32-33 depend upon the claim 31 and are allowed for the reasons discussed above. The claims 35-36 depend upon the claim 34 and are allowed for the reasons discussed above.

The claims 37-38 of the amendment of 3/19/2007 are allowed for the reasons set forth below. The Claim 37 or 38 set forth in the amended claimed invention of 3/19/2007 would

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provide a three-color pixel element of spaced-apart emitters in which the pixel element consists of a blue emitter disposed at the center of a pair of opposing red and a pair of opposing green emitters and the plurality of pixel elements may be arranged in rows and columns to form a display in which this array provides better perceived resolution and appearance of single full color displays by matching the human vision system. The claim invention would also provide the drive matrix for the pixel array consists of a plurality of rows and columns of the three-color pixel element and the drive matrix consists of a plurality of row and column drivers to drive the individual emitters in which the row drivers drive the red, green and blue emitters in each row, and the red and green emitters in each column are driven by a single column driver and a single column driver drives two columns of blue emitters. Thus, the number of drive lines and associated driver electronics used in the prior art are reduced in the claimed invention.

The claims 42, 52-55 and 63 of the amendment of 3/19/2007 are allowed for the reasons set forth below. Nothing in the prior art anticipates or suggests, "at least first and second gate drivers oriented in a first direction and at least first and second data drivers oriented in a second direction different from said first direction and a first blue emitter is connected to a first gate driver in said first direction and to a first data driver in said second direction; and wherein a second neighboring blue emitter is connected to said first data driver in said second direction" in a display comprising a plurality of three-color pixel elements, as set forth in the independent Claim 42. The claims 52-55 and 63 depend upon the claim 42 and are allowed for the reasons discussed above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCW

